



# Secure Remote Photo Identification With ID card



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# Basic concept: Remote Photo Authentication



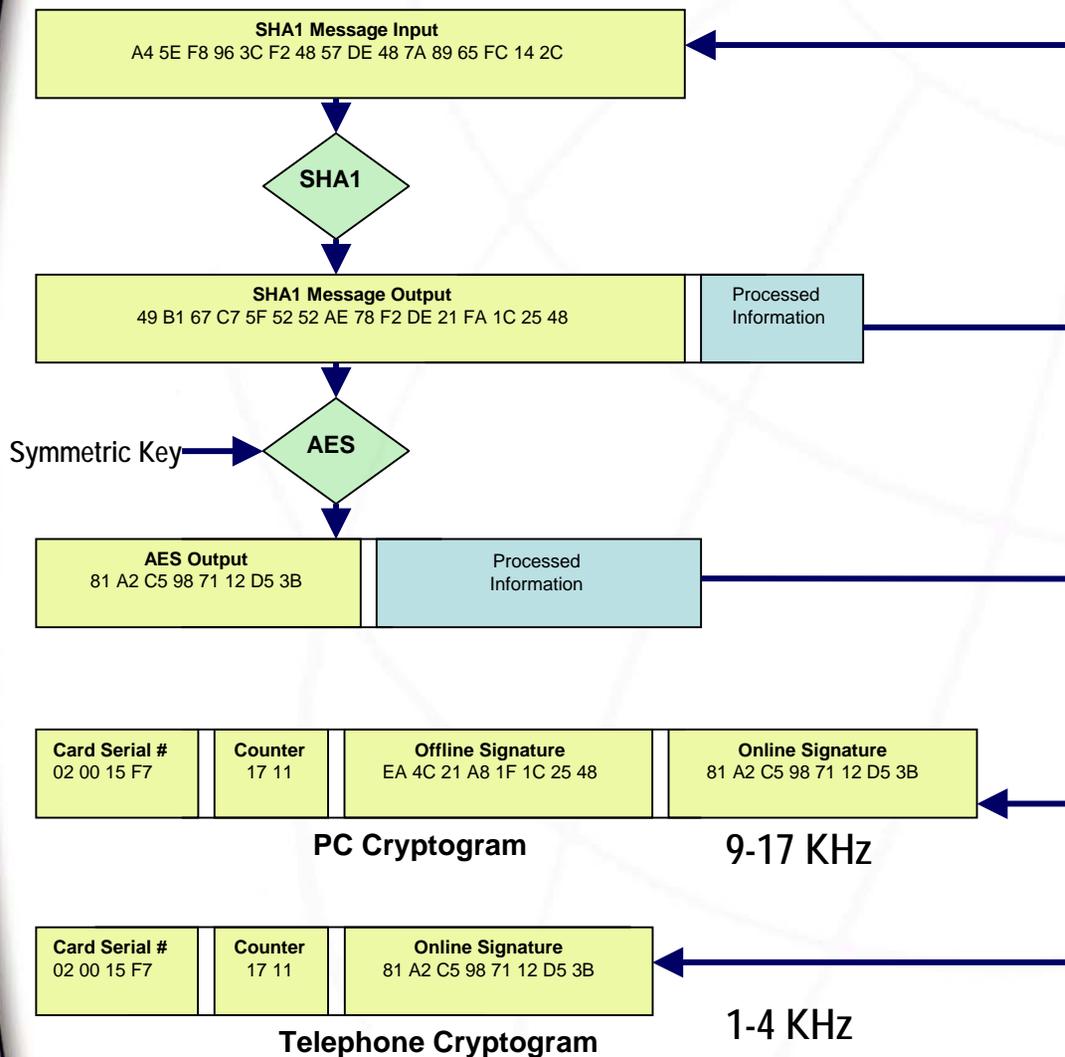
Authorities can securely identify cardholders using existing cell phones and the nCryptone Card. This card emits a secure acoustic cryptogram to the phone microphone. After strong authentication, a secure server sends the cardholder's photo to the cell phone for validation by officials.

**2 Factors – Biometric photo/facial recognition and Cryptogram**





# I know the card is authentic because ...



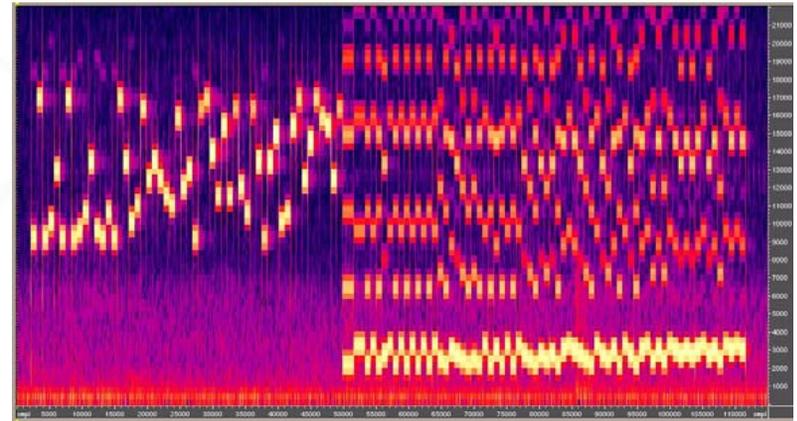
The nCryptone card contains an advanced acoustic encryption module that emits a unique cryptogram that is delivered in acoustic tones each time the button is pushed.

These tones are created in various frequencies optimized for particular infrastructure and are compatible with existing Telephones, PDA's, PCs and Radios.

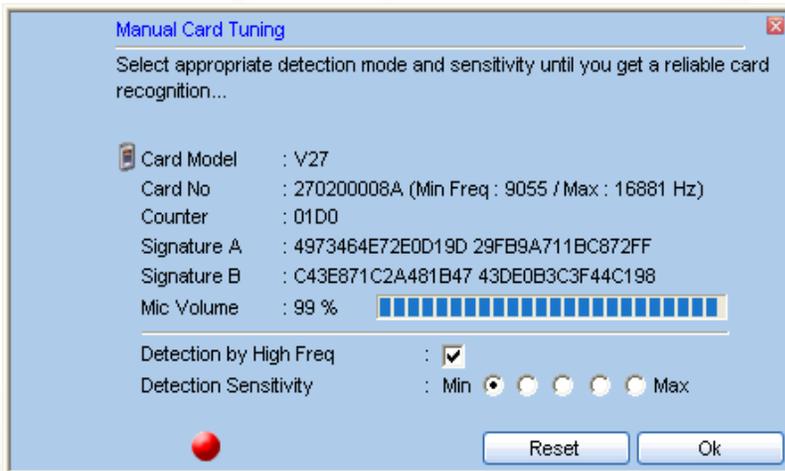


@ I know the card is authentic because ...

The acoustic cryptogram is unique.



Acoustic Cryptogram



Digitized Cryptogram created from Acoustic Cryptogram

This Dynamic Password is digitized and linked to a Secure Radius Server.

Cryptogram changes every time card is used.



ⓐ I know the user is authentic because ...

## Double/Triple Authentication

### 1. Photograph sent to

- Mobile phone
- PC
- Blackberry



### 2. Optional Cardholder Pin code

- On Board card itself or
- Using Existing Phone/PC/Radio Keypad



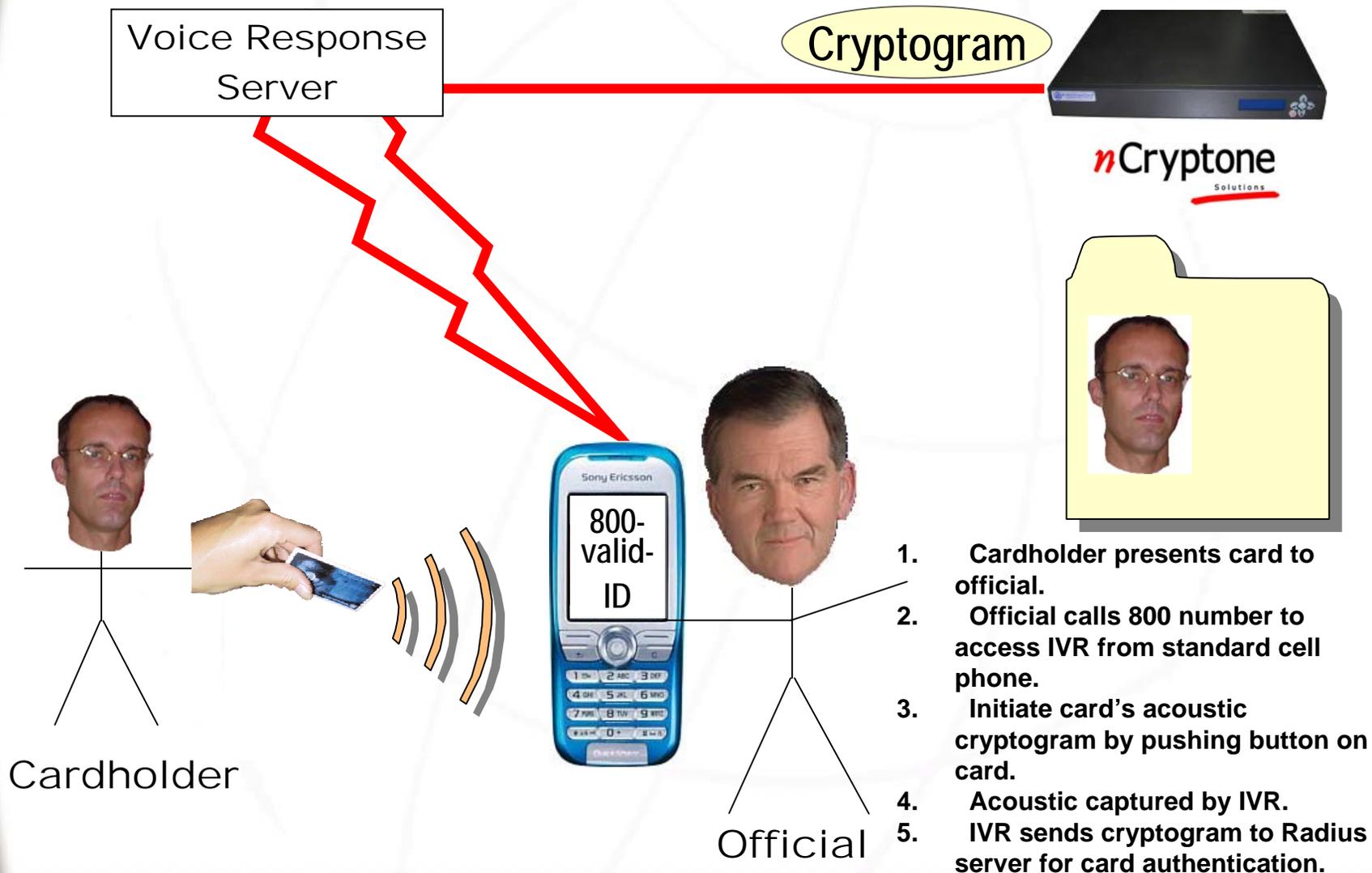
## ⓐ Authentication Scenario

1. Cardholder presents card to official.
2. Official uses standard cell phone and calls 800 number to access IVR.
3. Upon reaching the IVR the official initiates card's acoustic cryptogram by pushing button.
4. IVR sends cryptogram to Radius server for card authentication.
5. After card authentication, server sends cardholder's photo via MMS to cell phone.
6. Authority verifies photo received against actual cardholder.

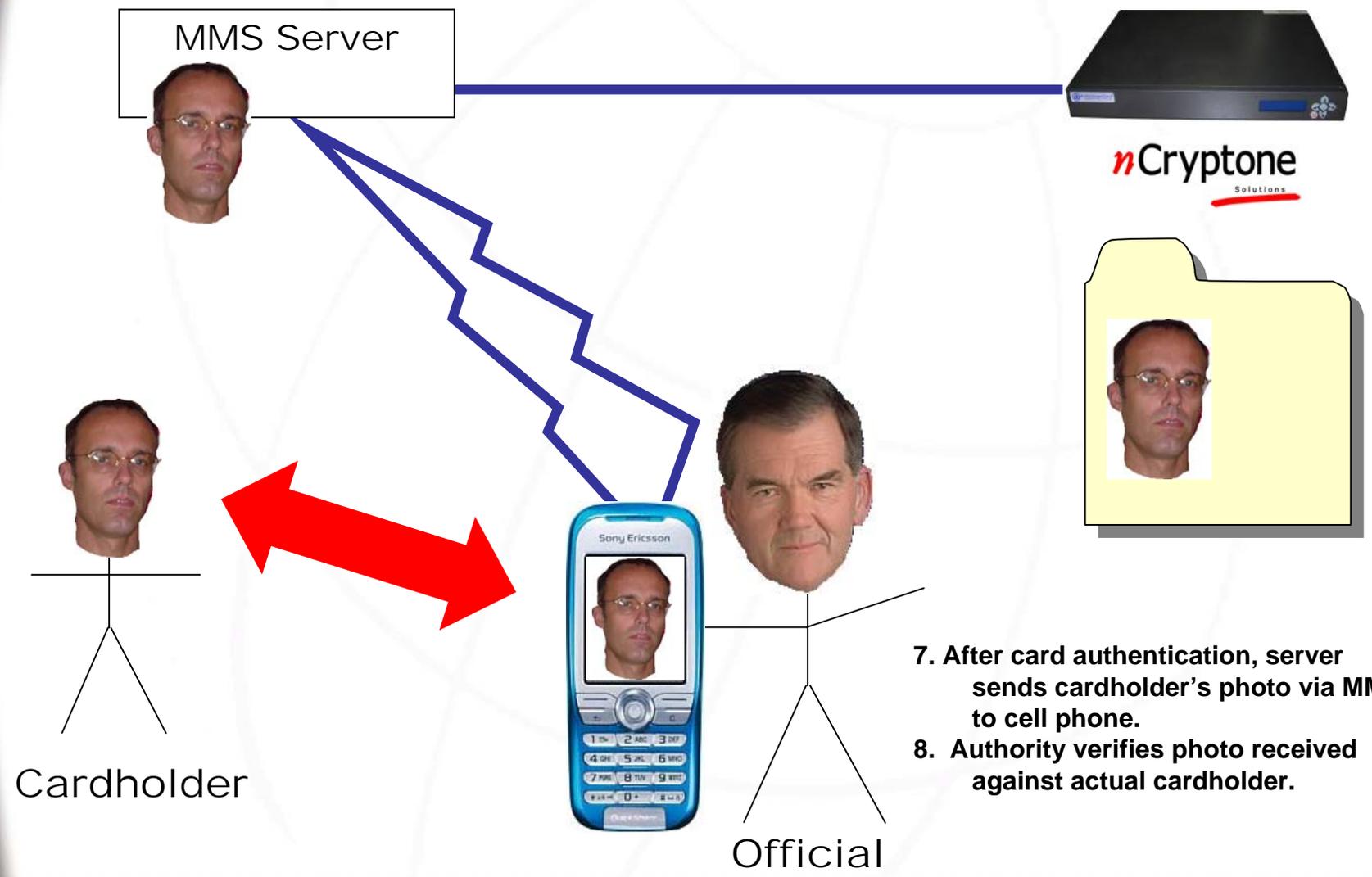




# Card Authentication (click once for animation)



# @ Photo Delivered (click once for animation)



- 7. After card authentication, server sends cardholder's photo via MMS to cell phone.
- 8. Authority verifies photo received against actual cardholder.



## Advantages

1. Immediate deployment at Low-Cost.
2. No reader infrastructure necessary.
3. Real-time notification of revocation or status changes
4. No dependency on photos or information on card.
5. Extreme Security - Strong authentication based on most advanced cryptology.
6. Existing world-wide network and infrastructure for immediate photo delivery.
7. Compatible with existing CAC (EMV), RFID (contactless), Mag-Stripe, or other Identification card systems.





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